

was excited early one autumn morning by the noisy activity of a flock of crows in a field within sight of his bedroom window. He perhaps would have thought no more of the matter had not the same thing occurred on the following day. This stimulated him to investigate. On reaching the spot he found that the crows had been feeding on *Agaricus campestris* which was growing there in abundance. The evidence was unmistakable. Amused at their careless betrayal of their plunder — so unlike the usual behavior of mycophagists — he took measures to anticipate and disappoint the crows thereafter.

CAMBRIDGE, MASSACHUSETTS.

A NOTE UPON RECENT TREATMENT OF HABENARIA HYPERBOREA AND ITS ALLIES.

A. LE ROY ANDREWS.

DR. RYDBERG'S elaboration of this puzzling section of the genus *Habenaria* in the Bulletin of the Torrey Botanical Club, for November, 1901 (pp. 605-632) recalls notes which I have been accumulating for several years which seem to find their explanation in it. The section has been subject to a variety of treatment, from that of Kraenzlin on the one hand, who reduces its American representatives to two species including as varieties of *Platanthera hyperborea* such distinct forms as Lindley's *Platanthera dilatata*, *P. convallariaefolia* and *P. leucostachys*, to that of Dr. Rydberg, who, maintaining the other extreme, restores the species of Lindley and other authors and adds a number of new ones until the two have become twenty-three. For these he institutes a new genus *Limnorchis*.

The portion of his key including the six species to which he definitely assigns stations in New England is as follows.—

Flowers green.

Spur decidedly clavate, thickened and obtuse at apex, shorter than lip.

1. *L. major* (Lange) Rydb.

Spur slender, scarcely thickened toward apex, often acutish, equalling or slightly exceeding lip.

Plant tall and stout; flowers comparatively large; sepals 4-6 mm. long.

2. *L. media* Rydb.

Plant slender, flowers small; sepals 2.5-4 mm. long.

Flowers almost erect in rather lax spike.

3. *L. Huronensis* (Nutt.) Rydb.

Flowers lateral in dense spike.

4. *L. hyperborea* (L.) Rydb.

Flowers white or nearly so.

Petals broadly lanceolate; flowers inodorous or nearly so.

5. *L. dilatata* (Pursh) Rydb.

Petals narrowly linear-lanceolate; flowers very fragrant.

6. *L. fragrans* Rydb.

Without discussing the new genus or the general treatment which is clear and illustrated throughout with drawings of the flowers, I should not be greatly surprised if our New England specimens would show forms fitting more or less well into the above classification. My own observations, of which I spoke, are these. In a cold swamp in Pownal, Vt., grows a plant, which could only be assigned to *Habenaria hyperborea*, of enormous size, frequently reaching a height of two feet and upwards, with long, densely-flowered spikes. In woods below a spring, on the lower slopes of Mt. Greylock in Williamstown, Mass., by wooded roadsides in Pownal and at other points in the vicinity is to be found a very distinct form which must also be *H. hyperborea*, the latter slender, rarely a foot in height, with fewer leaves, shorter spikes, and few flowers, so much smaller in every way as to attract one's attention at once. On closer examination a decided difference was evident in the spur, that of the larger specimens being slender, filiform, acute at apex, but slightly curved, and a little longer than the lip, resembling that of *H. dilatata*, while that of the small form was shorter, more curved, seemingly thicker and more blunt. Another point of difference not mentioned in Dr. Rydberg's article, making the two almost impossible of identity, is the date of flowering. The large type as noted for several consecutive years blooms regularly in early June and by first of July has ordinarily completely passed, the smaller not beginning before late July, few flowers being open the past summer on July 21, while in 1898 they were in fresh condition, some yet unopened, on August 6. There is not such difference in condition of habitat as to explain this fact if the plants were the same.

The large form from Pownal corresponds perfectly with the description and illustration of *Limnorchis media*. The name refers to the fact that the form is intermediate between *hyperborea* and *dilatata* types, not at all to size, as Rydberg calls it the largest of the *hyperborea* group. The small type may agree with the original *Limnorchis* or *Habenaria hyperborea*. What I have taken as *Habenaria dilatata*, occurring in a peat-bog in Pownal, is plainly in its narrow petals and sepals and very sweet fragrance his *L. fragrans*. Specimens are cited

of *L. major* from Maine, of *L. media* from Vermont, of *L. Huronensis* from Vermont, Massachusetts, and Connecticut, of *L. hyperborea* from Vermont; and of *L. fragrans* from Vermont.

MT. PLEASANT, PENNSYLVANIA.

CONCERNING THE PLANTS MENTIONED IN YOUNG'S CHRONICLES.—
In going through the numbers of the RHODORA to record the notices of Essex County plants in my card catalog, I found the article by Mr. S. B. Parish, "Vegetation in Plymouth Three Hundred Years Ago," where the writer quotes "Young's Chronicles of the Pilgrim Fathers 1602-1625," as follows:— "vines everywhere, cherry trees, plum trees, Many kinds of herbs we found here in winter, as strawberry leaves innumerable, sorrel, yarrow, carval, brooklime, liverwort, water cresses, great store of leak and onions and an excellent kind of flax or hemp" (RHODORA, Jan. 1901, p. 17).

Referring to this often quoted paragraph, the late Dr. Charles Pickering, in a letter to me dated November 10, 1875, writes:—"My attention has recently been directed to Mourt's Relation of the Landing at Plymouth, from his having borrowed Higgeson's account of the plants around Salem, pretending that at Plymouth although 'in winter' there were growing around the landing place

'sorrel, yarrow, carvel, brooklime, liverwort, watercresses,' etc.

'sorrel, brooklime, liverwort, carvell, and watercresses'

were found in 1630 by Higgeson around Salem (Hist. col. I. p. 121.); 'carvell' (chervil) is pretty clearly *Osmorrhiza longistylis*, observed by myself in Paradise a local name for a formerly lovely region near Salem] in the broken rocky place in front of Gen. Devereux's residence; perhaps the very spot where it was seen by Higgeson. 'brooklime,' *Veronica beccabunga*, has been observed by myself in the cedar-margined outlet of Mineral-spring pond, and may have been seen there by Higgeson, especially as he describes the 'Giant's battle-field' [the scattered boulders: near there].

Higgeson also mentions 'two kinds of flowers very sweet, which they say are good to make cordage' (*Apocynum androsaemifolium*, and the depressed form of *A. cannabinum* growing around Middleton pond and pointed out to me by Oakes)."

I think that the quotation from Dr. Pickering's letter requires no comment of mine, but it is evident that the region about Salem not